

# CALIFORNIA STATE DEPARTMENT OF PUBLIC HEALTH

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WALTER M. DICKIE, M.D., Director

## Weekly Bulletin



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GUY P. JONES  
EDITOR

## *Optimum Nutrition—An Obvious Essential for Every School Child\**

By LILLIAN BRINKMAN, Chief, Nutrition Services, Bureau of Child Hygiene, California State Department of Public Health

Not a day passes but that the lay or professional person who reads the newspaper, or listens to radio programs or goes to lectures on health or other lectures on food is not told what to eat or not to eat; what will or will not happen to him or her if he or she does thus and so. Information on foods and suggestions for their uses is coming to us from many sources. Food, together with fresh air, sunshine and exercise, is among the basic requirements of the human being. Therefore, we must be in a position to judge discriminately reliable from unreliable information on foods and nutrition, so freely disseminated.

What are the nutritional trends of today, according to the most reliable studies available? How do our school children measure up nutritionally? How can we acquire authentic information? If we hope to be able to assist in passing on accurate information we should be in a position to answer these questions.

Nutrition inadequacies, malnutrition and undernourishment are often overlooked because they work insiduously. Malnutrition is not acutely painful. Not many deaths occur in this country due entirely to malnutrition or undernourishment. However, many deaths from diseases caused by lowered resistance and traceable to malnutrition do occur. Malnutrition among infants and children may not be a temporary

thing. Many ills of adulthood can be traced to poor nourishment during infancy or during the school life of the individual.

The nutritional status of school children is being determined with increasing proficiency. Research studies have evolved significant improvements in the techniques used to determine the prevalence of malnutrition and undernourishment among school children. Methods commonly employed are based upon:

1. Evidences of physical deviations from the normal standard as discovered by a physician.
2. Evidences of dental defects.
3. Evidences of dietary practices.

Gross signs of malnutrition are easily discovered; others are more difficult to diagnose. There may be many stages of malnutrition between good health and the visible signs of malnutrition. Therefore, it is important that one does not rely entirely upon the outward signs of the physical body. It is important, however, that every teacher and parent recognize the outward signs of a well-nourished child.

The prevalence of dental decay among school children is a simple and graphic picture of the nutritional status of school children. Dr. Lydia Roberts of the University of Chicago, who has devoted many years to nutrition work with children, believes that the nutritional status of a child can be determined *some-what* by the amount of dental decay present in that

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child; she states: "Though it is realized that other factors may be involved, it is now recognized that the development and preservation of the teeth is largely dependent upon nutrition, and that dental defect may, therefore, in a measure at least, be classed among the nutritional diseases along with scurvy, rickets, beriberi, pellagra and others."

Studies of dietary practices have shown in some instances only 7 per cent of the school children in a large school were judged to be in a good physical condition. All others showed defects. It has not been uncommon to find that some studies record as high as 90 per cent of the children with some forms of defects traceable to an insufficient amount of or lack of a kind of food. Usually, it has been the *kind* of food. In California at the present time we find among the less privileged groups an insufficient amount of foods as well as a deficiency in kinds of foods.

We need a sturdy, healthy race to carry on those traditions we consider worthwhile and essential to our democratic society. Children must be well nourished if they are to be healthy in every way. This does not mean that well-nourished children can not become ill; but such children usually have more resistance to many kinds of diseases and their chances to recover quickly are much greater. We know there is a simultaneous development of body and mind. The physical status of a school child is reflected perceptibly in his mental and physical achievements.

Recently a feeding experiment was carried on in a St. Paul, Minnesota, grade school. All malnourished and undernourished children were provided well chosen foods paralleling an educational program for the development of good food habits. For these children the results showed a marked improvement in scholarship, attentiveness and posture. The degree of excitability and the incidence of colds also were considerably reduced. It is, therefore, essential that every boy and girl in our schools learn that proper nutrition is a fundamental factor to successful living.

The development of habits which make for optimum nutrition is wholly a matter of education and educators can assist immeasurably. This development of desired food habits is not always a simple task. Apparently there is no "instinct" for a good diet. It would seem, more emphatically, that the contrary is true. Drummond, of England, says, "I have met men who have fallen victims to scurvy without even once experiencing a desire to eat a protective food and indeed, under conditions where fresh fruits are constantly at hand." In discussing such an instinct in children Roberts has aptly remarked, "A child in a

peasant's home, where the diet consists solely of simple natural foods like milk, whole rye bread and cabbage, can possibly be trusted to eat the kind and amount of food he desires. To apply the same rule to a child in an average American home would be disastrous."

How could a child discover for himself the need for a dietary constituent, when even complete deprivation of it might not manifest itself in any external way for years? The use of sugar, white bread and coffee—the worst features of the American diet—seems to be a custom most quickly copied by foreigners—and children.

Many teachers help to reach the objective of attaining optimum nutrition for all school children? The answer is "yes" and the method is to teach and motivate good food habits. Most teachers will find that this is not always an easy task, but they will find, too, that it is not impossible.

To outline briefly the important steps these things should be realized:

Teachers will need to keep in mind that they are leaders. Parents, too, will need to be made conscious of the fact that they are leaders. Disparaging remarks about wholesome food should never be permitted, for it must be remembered that eating has certain psychological aspects and that children are quick to acquire the notions of those with whom they associate. If a teacher or parent sneers at milk and cereal or wholewheat bread and butter, how can anyone expect a child to relish those foods? Most food aversions are acquired in early life when the sensibilities are keenest.

By means of nutrition information woven into the general units of study or into special units on health, the teacher can effectively teach that the building of a strong body is governed by laws which should be respected. The teacher can impress her students with the fact that it is those things which they do for themselves that will determine the kinds of bodies they have developed.

The school lunch, in addition to providing the noon meal, has proved to be an excellent medium through which to develop good food habits. In the class periods, the children learn about the foods which are best for them; the lunch at noon gives immediate opportunity for practical application. The lunch, therefore, must consist of well chosen foods. It matters not whether it is a home packed lunch, a one-dish meal prepared in school and supplemented by a home packed lunch, or a complete lunch served in the school lunch room. The availability of federal surplus commodities for school lunches for either of the last two



types is changing the lunch room picture very rapidly. It offers opportunities for improved lunches as well as presenting new problems. The latter are concerned with the lack of trained persons in charge of lunch rooms.

The teacher in a one-room school has, perhaps, the most ideal situation for developing good food habits and for teaching children to eat those foods which are strange to them but are essential to a good meal. If the children participate in the preparation of the one hot dish which they will eat at noon, they often will eat new foods more readily. Unless foods are actually eaten they are not contributing to the well being of the child. The body is built and regulated by the elements in the foods eaten. If the foods do not contain the necessary elements, the body is deficient. The body machinery, like an automobile engine, ceases to function properly when essentials are missing. The human body is not capable of synthesizing any one of these elements. All materials for building and regulating the body must come from the foods eaten by each individual. It is obvious that the teachers' first aim is to develop the attitudes which will motivate a child to learn to like any food he requires. Secondly, the teacher should attempt to develop the desired food habits by providing practical application for their development. The lunch room can be the solution, in part, but only if the proper foods are supplies, prepared carefully to conserve their food elements and are served attractively and simply.

In a graphic way I have tried to show that foods vary as to the amount and kind of the essentials they contain. The human body requires certain essentials and in minimum quantities for physical growth and development. To insure optimum nutrition, a liberal intake of the essentials is necessary. This means that children and adults, to enjoy good nutrition, will need to eat those foods containing the essentials and eat them in quantities sufficient to cover individual requirements. The more of the so-called natural foods included in the meals, the more likely one is to be assured of a safe margin of the essentials. Often, children will have to be taught to like these foods. Then it is the teacher's problem to solve and to help in this education for optimum nutrition.

To tell people they can do as they please, to give them in democracy free speech, free press, free assembly, is not the solution of the problem. That is the problem. No other way of life so much as democracy calls for intelligence, character and moral responsibility inside the citizen.—Rev. Harry E. Fosdick, D.D., pastor of the Riverside Church, N. Y.

### SAN FRANCISCO DOGS AND CATS QUARANTINED

Under date of February 23, 1940, Dr. W. M. Dickie, Director of the California State Department of Public Health, placed a quarantine upon dogs and cats within the City and County of San Francisco, in accordance with the provisions of sections 1900 to 1918 of the Health and Safety Code. The establishment of the quarantine followed an investigation, made as required by law. The original order was modified subsequently to define the quarantine as confinement of all dogs and cats within the designated area upon the private premises of the owners, under restraint by leash or within properly constructed enclosure, except that persons over the age of 15 years shall be permitted to take their dogs and cats on the public streets and highways within the quarantine area when such animals are controlled by suitable leash not over six feet in length and when so controlled may also take them on the highway in automobiles within the quarantine area but not in any bus, or other public conveyance; except, that those dogs and cats quarantined as rabies contacts and confined to their premises or such other place as may be designated by the health officer, or his representative, shall not be permitted to leave the designated premises upon which they are confined. Such dogs and cats quarantined as rabies contacts shall either be destroyed or quarantined for a period of three months. No dog or cat shall be taken or allowed to go into or out of the quarantine area, except upon presentation of a written permit issued by the health officer of San Francisco or issued by his representative authorized to issue such permits.

War begets poverty,  
Poverty peace,  
Peace begets plenty,  
Then riches increase;  
Riches bring pride,  
And pride is war's ground,  
War begets poverty—  
So goes the round.  
—Author Unknown.

### MORBIDITY

Complete Reports for Following Diseases for Week Ending  
March 2, 1940.

#### Chickenpox

663 cases: Alameda County 4, Alameda 4, Berkeley 8, Emeryville 1, Oakland 40, San Leandro 6, Colusa County 1, Contra Costa County 10, Concord 2, Pittsburg 7, Placerville 3, Fresno County 17, Coalinga 3, Fresno 3, Sanger 2, Imperial County 1, Inyo County 2, Bishop 1, Kern County 20, Bakersfield 12, Delano 1, Hanford 9, Lake County 2, Los Angeles County 29, Alhambra 8, Burbank 3, Compton 7, Culver City 8, Glendale 8, Inglewood 1, Long Beach 66, Los Angeles 65, Pasadena 5, Santa Monica



3, Torrance 1, Lynwood 5, South Gate 1, Bell 1, Madera County 3, Madera 10, Merced County 1, Monterey County 3, Salinas 1, Napa 1, Grass Valley 2, Orange County 3, Fullerton 1, Newport Beach 3, Santa Ana 1, Seal Beach 1, Laguna Beach 9, Placer County 6, Riverside County 5, Riverside 20, Indio 3, Sacramento 15, San Bernardino County 1, Ontario 1, San Diego County 8, La Mesa 7, San Diego 3, San Francisco 76, San Joaquin County 1, Stockton 8, San Luis Obispo County 2, San Luis Obispo 3, Burlingame 5, Daly City 5, Santa Barbara County 5, Santa Barbara 2, Santa Clara County 4, Palo Alto 3, San Jose 4, Santa Cruz County 1, Shasta County 1, Solano County 9, Sonoma County 8, Petaluma 1, Santa Rosa 1, Sutter County 1, Red Bluff 2, Tulare County 19, Tulare 4, Visalia 3, Ventura County 5, Fillmore 1, Ventura 1, Yolo County 9, Winters 1.

#### Diphtheria

22 cases: Oakland 2, Los Angeles 1, Napa County 1, Corona 2, Riverside 1, Colton 1, San Bernardino 1, San Diego County 1, San Diego 1, San Francisco 3, Santa Clara County 1, Redding 1, Petaluma 1, Santa Rosa 1, Tulare County 2, Ventura 1, Marysville 1.

#### German Measles

28 cases: Alameda County 1, Alameda 1, Berkeley 5, Oakland 3, Kern County 1, Los Angeles County 1, Glendora 1, Long Beach 1, Los Angeles 1, Pasadena 1, Pomona 1, Orange County 1, Anaheim 1, Santa Ana 1, San Diego 2, San Francisco 3, Paso Robles 2, Santa Barbara County 1.

#### Influenza

601 cases: Berkeley 26, Oakland 1, Contra Costa County 1, Crescent City 1, Fresno County 63, Inyo County 18, Bishop 2, Kern County 9, Delano 1, Taft 8, Los Angeles County 141, Alhambra 2, Burbank 1, Culver City 1, El Monte 10, Glendale 3, Glendora 1, Hermosa 1, Huntington Park 1, Inglewood 1, Long Beach 10, Los Angeles 101, Montebello 1, San Fernando 1, San Gabriel 12, Sierra Madre 1, Monterey Park 1, Mendocino County 1, Laguna Beach 2, Riverside County 2, Corona 2, Indio 2, Sacramento County 1, Sacramento 2, San Diego County 55, San Diego 2, San Francisco 5, Santa Barbara County 2, Santa Barbara 1, Santa Clara County 11, Santa Cruz County 2, Sonoma County 11, Sutter County 1, Tulare County 27, Lindsay 39, Visalia 17, Ventura County 6, Bell 1.

#### Malaria

2 cases: Stockton 1, Solano County 1.

#### Measles

462 cases: Berkeley 2, San Leandro 2, Imperial County 2, Calexico 2, El Centro 1, Kern County 37, Bakersfield 1, Delano 2, Kings County 1, Los Angeles County 6, Alhambra 1, Burbank 1, Huntington Park 1, Long Beach 1, Los Angeles 18, San Fernando 14, Santa Monica 1, Monterey County 2, Carmel 1, Pacific Grove 1, Orange County 1, Santa Ana 1, Rocklin 1, Riverside County 1, Indio 1, Sacramento 2, San Bernardino County 1, San Diego County 63, El Cajon 2, Escondido 6, La Mesa 1, National City 18, San Diego 184, San Francisco 3, San Joaquin County 21, Lodi 1, Stockton 4, San Luis Obispo 2, Palo Alto 1, Santa Cruz 1, Siskiyou County 1, Vallejo 1, Tulare County 30, Tulare 5, Visalia 1, Ventura County 1, Ventura 1, Yolo County 7, Woodland 3.

#### Mumps

391 cases: Alameda County 8, Alameda 1, Berkeley 3, Oakland 10, Calaveras County 1, Pittsburg 1, Fresno County 26, Sanger 5, Kern County 5, Bakersfield 2, Taft 1, Hanford 4, Los Angeles County 25, Compton 2, El Segundo 2, Glendale 4, Inglewood 2, Long Beach 42, Los Angeles 15, Pasadena 2, Pomona 1, San Fernando 2, Sierra Madre 1, Lynwood 1, Gardena 1, Madera County 9, Madera 5, Orange County 2, Anaheim 9, Fullerton 5, Orange 1, San Clemente 1, Riverside County 1, Riverside 9, Indio 4, Palm Springs 1, San Francisco 52, San Joaquin County 5, Manteca 4, Stockton 24, San Luis Obispo County 1, Paso Robles 3, San Mateo County 1, Burlingame 2, Redwood City 3, San Mateo 8, Menlo Park 1, Santa Barbara 1, Santa Clara County 14, Mountain View 16, Palo Alto 17, Sunnyvale 1, Benicia 2, Vallejo 1, Sutter County 1, Trinity County 2, Tulare County 12, Yolo County 4, Davis 1, Woodland 1.

#### Pneumonia (Lobar)

100 cases: Berkeley 1, Emeryville 1, Oakland 3, Contra Costa County 1, Martinez 1, El Dorado County 2, Fresno County 4, Imperial County 1, Holtville 1, Bakersfield 1, Los Angeles County 7, Beverly Hills 1, Culver City 1, Glendale 1, Huntington Park 1, Long Beach 4, Los Angeles 30, Pomona 2, Maywood 1, Gardena 1, Marin County 1, Nevada County 1, Huntington Beach 1, Santa Ana 2, Sacramento County 3, Sacramento 3, Isleton 1, San Bernardino County 1, National City 1, San Diego 1, San Francisco 8, San Luis Obispo 2, Burlingame 1, San Mateo 1, San Carlos 1, Belmont 1, Trinity County 1, Tulare County 1, Ventura County 1, Yolo County 2, Woodland 1.

#### Scarlet Fever

181 cases: Alameda County 2, Berkeley 1, Hayward 1, Oakland 5, El Dorado County 1, Fresno County 2, Reedley 1, Imperial County 2, Westmorland 2, Kern County 3, Los Angeles County 17, Arcadia 2, Burbank 3, Compton 3, Culver City 1, Glendale 4, Hermosa 3, Inglewood 1, Long Beach 1, Los Angeles 38, Monrovia 1, Montebello 1, Santa Monica 2, South Pasadena 1, Whittier 2, Monterey Park 2, Gardena 2, Madera 1, Mendocino County 4, Fort Bragg 3, Pacific Grove 1, Salinas 1, Napa County 1, Calistoga 1, Napa 3, Huntington Beach 1, Lincoln

1, Riverside County 4, Corona 3, Hemet 1, Riverside 1, Sacramento 1, Ontario 1, San Bernardino 4, San Diego County 3, San Diego 2, San Francisco 9, Lodi 1, Stockton 3, San Luis Obispo 2, Daly City 1, Santa Barbara County 1, Santa Barbara 1, San Jose 2, Sonoma County 3, Petaluma 2, Santa Rosa 1, Tulare County 4, Porterville 1, Ventura County 4, Ventura 3, Yuba County 1, Marysville 1.

#### Smallpox

No cases reported.

#### Typhoid Fever

No cases reported.

#### Whooping Cough

171 cases: Fresno County 9, Fresno 4, Sanger 2, Kern County 15, Los Angeles County 17, Burbank 1, Glendale 1, Long Beach 3, Los Angeles 10, San Fernando 1, Santa Monica 2, Whittier 6, Bell 1, Madera County 9, Madera 4, Merced County 4, Merced 1, Orange County 1, Anaheim 1, Riverside County 2, Corona 1, Indio 1, Sacramento 5, San Bernardino County 1, Redlands 1, San Diego County 3, San Diego 1, San Francisco 5, Menlo Park 2, Santa Clara County 4, Palo Alto 3, San Jose 22, Sunnyvale 3, Sonoma County 4, Yuba City 2, Tulare County 13, Lindsay 1, Visalia 4, Woodland 1.

#### Anthrax

1 case: San Francisco.

#### Meningitis (Epidemic)

1 case: Los Angeles.

#### Dysentery (Amoebic)

3 cases: Fresno County 1, Sanger 1, Ontario 1.

#### Dysentery (Bacillary)

13 cases: Inyo County 1, Los Angeles County 1, Los Angeles 7, San Fernando 1, Madera County 1, San Francisco 1, San Mateo 1.

#### Pellagra

2 cases: Los Angeles.

#### Poliomyelitis

4 cases: Butte County 1, Contra Costa County 1, Santa Clara County 1, Woodland 1.

#### Tetanus

1 case: Santa Monica.

#### Trachoma

1 case: Los Angeles.

#### Encephalitis (Epidemic)

2 cases: Pittsburg 1, Los Angeles 1.

#### Jaundice (Epidemic)

3 cases: Trinity County.

#### Food Poisoning

21 cases: Berkeley 7, Los Angeles County 3, Los Angeles 5, San Francisco 6.

#### Undulant Fever

1 case: Mendocino County.

#### Septic Sore Throat

1 case: San Diego.

#### Epilepsy

49 cases: Fresno 2, Selma 1, Los Angeles County 8, Glendale 1, Inglewood 1, Los Angeles 23, Pasadena 2, Sacramento County 2, San Bernardino 1, San Diego 1, San Francisco 4, Palo Alto 1, Tulare County 1, Ventura County 1.

#### Rabies (Animal)

4 cases: Los Angeles County 1, Los Angeles 3.

We owe it to ourselves to try to understand what is going on in the world and to prepare to carry on into the future the greatest values which the human race has found.—Dr. Ada L. Comstock.

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